

narrowly black or piceous at the apex; fourth, basal third, except a narrow black ring at the base, yellow or yellowish white, apical two thirds black. *Eyes* reddish or chestnut. *Ocelli* red. *Rostrum* yellow, apex black, beneath finely punctured, with a longitudinal black central line, and a short one of the same colour on either side of it at the base.

Thorax.—*Pronotum*, lateral margins and the apical two thirds of the disk very delicately black-punctured; posterior angles elevated into a callus, which is piceous; down the centre a slightly elevated unpunctured yellowish line; at its termination before reaching the anterior margin two (sometimes four) minute black spots. *Scutellum* finely black-punctured. *Elytra* more coarsely and sparingly punctured than the previous portions: *clavus* with a row of fine, more or less black, punctures next the suture, and another along the inner margin; disk irregularly and very sparingly punctured: *corium*, first nerve on both sides and the inner nerve on the inside with a row of fine black punctures; disk more sparingly and coarsely punctured; apex, and generally the inner posterior angle, piceous or black. *Membrane* pale, between the nerves pale piceous. *Sternum* fulvous or grey-yellowish, punctured on the sides; the punctures sometimes blackish; down the centre broadly black. *Mesosternum* with a deep longitudinal channel, widest posteriorly; adjoining the base of the first and second pair of legs is a black spot. *Legs* fulvous or yellowish: *coxae* anteriorly with a piceous spot at the base: *thighs* finely black-punctured, the punctures somewhat disposed in longitudinal rows; *tibiae* sparingly and finely black-punctured; *tarsi* yellowish, apex of the first, second, and third joints black.

Abdomen above black, with a broad yellowish streak down the centre, widened at the posterior margin of each segment, so that on each segment the streak appears I-shaped; beneath fulvous or grey-yellowish, with a longitudinal black central line, and another on either side, composed of black punctures. *Connexivum* above yellow; posterior margin of the three or four terminal segments narrowly black.

Length 6-6 $\frac{3}{4}$ lines.

[To be continued.]

XLVI.—*Descriptions of new Species of Sesia in the Collection of the British Museum.* By ARTHUR GARDINER BUTLER, F.L.S., F.Z.S., &c.

Sesia Grotei, n. sp.

Wings above hyaline, veins black; primaries with costa black; outer margin broadly chocolate-brown, broad on costa
Ann. & Mag. N. Hist. Ser. 4. Vol. xiv. 26

(5 millimetres) and narrowing gradually to external angle ($1\frac{1}{2}$ millimetre), strongly dentated internally between the nervures, as in *S. fuscicaudis* (*Hæmorrhagia fuscicaudis* of Grote); a reddish diffused apical subcostal streak upon external border; interno-basal area dark chocolate-brown, clothed at the base with testaceous hair-scales; secondaries with the base and abdominal margins broadly dark chocolate-brown, the costa smoky brown; outer margin rather broadly bordered with dark chocolate-brown, denticulated internally: wings below nearly as above, but paler: head and thorax clothed above with sordid testaceous hair-scales; abdomen dark chocolate-brown, basal segments clothed with testaceous hair-scales; the two preanal segments yellow [the upper one slightly, the lower one distinctly brownish in the centre*]; anal tuft blackish; antennæ black; palpi above black, below pale sulphur-yellow; pectus pale sulphur-yellow; legs black; venter black; two preanal segments with a yellow tufted patch on each side.

Expanse of wings about 48 millimetres.

Hab. Texas (*Belfrage*). Type, B.M.

Allied to *S. axillaris*, Grote and Robinson, and *S. radians*, Walker.

Sesia alternata, n. sp.

Wings above hyaline, nervures black; primaries with costa and interno-basal area black, clothed with testaceous hair-scales; outer margin broadly chocolate-brown, twice as wide at costa as at external angle, strongly dentate-strigate internally, the dentes being even more developed than in *S. radians*; secondaries with costa greyish testaceous, yellowish at base; base and abdominal margin dark brown, varied with testaceous hair-scales; outer margin chocolate-brown (1 millimetre wide), an interno-median decreasing streak projected from anal margin: wings below with the brown borders redder than above; internal margin of primaries cream-coloured: head and thorax densely clothed with yellowish olivaceous hair-scales; eyes encircled with white: abdomen clothed with bright testaceous hair-scales, becoming yellowish tawny towards the middle; two central segments black-brown, with a sprinkling of tawny scales internally†; anal tuft tawny testaceous in the centre, blackish varied with testaceous at the sides; palpi above dark brown, below yellowish

* I think it possible that this may be due to staining; but it looks natural enough.

† In the type there is a dorsal brown streak; but as it disappears irregularly on the antepenultimate segment, I believe it is due to rubbing.

creamy; pectus, femora, and tibiae yellowish cream-coloured, tarsi chocolate-brown; basal half of venter clothed with red-brown and whitish hair-scales, anal half with yellowish creamy scales; anal tuft brown.

Expanse of wings 50 millimetres.

Hab. Hakodadi (*Whitely*). Type, B.M.

Undoubtedly the Japanese representative of *S. radians*, from which, however, it is readily distinguished by its smaller size, paler and duller colouring, the absence of orange colouring on the secondaries, the testaceous scaling on costa and interno-basal area of primaries, the testaceous scales mixed with the brown scales at the sides of the anal tuft, and the cream-coloured femora and tibiae below.

Sesia Whitelyi, n. sp.

♂. Wings above hyaline, with lilacine reflections, veins black; primaries with costa and interno-basal area black, clothed with sordid testaceous hair-scales; outer margin rather broadly dark chocolate-brown (4 millimetres at costa, $1\frac{1}{2}$ at external angle), undulated between the nervures internally; fringe brown, with a pale internal line; secondaries with costa, base, and inner margin grey; outer margin dark chocolate-brown (1 millimetre wide), an interno-median decreasing streak projected from anal margin: wings below with the base and costal margins pale ochraceous; outer margins red-brown, paler externally; inner margin of primaries cream-coloured, of secondaries dark brown; interno-median streak of secondaries dark brown: head above clothed with sordid testaceous hairs; thorax and abdomen clothed with stramineous hair-scales, inclining to tawny on collar, at base of pterygodes, on centre of thorax, and towards the centre and anal segments of abdomen; two central segments of abdomen blackish*; sides of anal tuft blackish brown; pectus and palpi below cream-coloured; legs dark brown, cream-coloured on their lower margins; venter dark brown, scattered all over with testaceous hair-scales, a central white spot on preanal segment; anal tuft dark brown, varied with dull creamy hair-scales.

Expanse of wings 49 millimetres.

♀. Larger and altogether more brightly coloured than the male.

Expanse of wings 60 millimetres.

Hab. Hakodadi, ♂ ♀ (*Stephens*); Japan, ♂ (*Fortune*). B.M.

Apparently the Japanese representative of *S. fuciformis*.

* There appears to be a blackish dorsal streak; but it may be due to rubbing.